

19. (Amended) A method for fabricating capacitors for semiconductor devices, comprising:

forming a lower electrode on a semiconductor substrate;
forming a first amorphous TaON thin film directly over the lower electrode;
annealing the first amorphous TaON thin film in an NH₃ atmosphere;
forming a second amorphous TaON thin film;
annealing the second amorphous TaON thin film a first time;
annealing the second amorphous TaON thin film a second time, thereby forming a TaON dielectric film having a multi-layer structure; and
forming an upper electrode over the TaON dielectric film.

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20. (Amended) A method for fabricating capacitors for semiconductor devices, comprising:

forming a lower electrode on a semiconductor substrate;
nitriding an upper surface of the lower electrode in an NH₃ atmosphere;
forming a first amorphous TaON thin film directly over the lower electrode;
annealing the first amorphous TaON thin film in an NH₃ atmosphere;
forming a second amorphous TaON thin film;
annealing the second amorphous TaON thin film at least once, thereby forming a TaON dielectric film having a multi-layer structure; and
forming an upper electrode over the TaON dielectric film.

Please see the attached Appendix for the changes made to effect the above claims.